

Prevention of Skin Cancer by Reducing Exposure to UV Light Through Educational and Policy Approaches at Child Care Centers

Skin cancer is one of the most common cancers in the United States. The strongest, preventable risk factor for developing skin cancer is exposure to the sun's ultraviolet (UV) rays. However, at least 50% of children do not protect themselves adequately from UV exposure, including many among the 13 million children under the age of six who are cared for by someone other than their parents in a child care center or a family care provider. The question is then, what are effective strategies to decrease sunburns and improve sun protective behaviors among children or among care givers at child care centers?

A systematic review of published studies, conducted on behalf of the Task Force on Community Preventive Services by a team of experts, found that there was insufficient evidence (i.e. studies) to determine whether or not educational and policy approaches in child care centers are effective in 1) improving "covering up" behavior [i.e. wearing protective clothing such as a shirt, long pants, and hat], or 2) increase in shade use or staying out of the sun during peak UV hours]. Sunscreen use was considered a secondary outcome meaning that a change in sunscreen use alone would not result in a recommendation but it should have accompanied one of the two recommendation outcomes. It is important to remember that **this finding does not mean this intervention does not work**, but rather indicates that additional research is needed to determine its effectiveness approaches.

Background on educational and policy approaches in child care settings

- Educational and policy approaches in child care centers were designed to decrease sunburns and increase sun-protective knowledge, attitudes, intentions, and behaviors among adults and children.
- Interventions reviewed within this category included:
 - curriculum that included interactive classroom and take-home activities to staff education
 - brochures for parents
 - working session to develop skin protection plans for child care centers
- All interventions reviewed focused on some combination of:
 - increasing application of sunscreen
 - scheduling activities to avoid peak sun hours
 - increasing availability of shade and encouraging children to play in shady areas
 - encouraging children to wear sun-protective clothing

Findings from the systematic review

Search results:

- 6000+ titles and citations screened
- 159 articles reviewed
- 85 studies included in one of the 9 intervention reviews conducted by the Task Force
- 2 qualifying studies

See citation information for all included and qualifying studies ([hyperlink to xml file](#))

- In its review of available studies on the effectiveness of this intervention, two studies were identified that addressed the effectiveness of educational or policy approaches in child care centers in decreasing sunburns or improving sun protective behaviors. These studies were not considered sufficient for the Task Force to base a recommendation on given the small number of studies and limitations in their design and execution.
- Along with the issue of effectiveness, other issues regarding this intervention were identified during this review. These include:
 - What attributes of this intervention contribute to effectiveness?
 - How can this intervention be implemented with minimal administrative burden and minimal disruption to the primary mission of the child care center
- Additional detail regarding key components of research in this area that could be improved so as to increase the body of evidence of effectiveness is available as part of a broad set of research questions.

Action Items

- Studies similar to those that were done in primary schools would help show effectiveness in this population. More interventions in this setting should include policy interventions. Information on current school guidelines is available at: <http://www.cdc.gov/cancer/nscpep/skin.htm>
- Use this finding and suggestions for improvement in research components and contact information from [Cancer Control PLANET](http://cancercontrolplanet.cancer.gov) (<http://cancercontrolplanet.cancer.gov>) to find local cancer prevention partners to conduct or seek resources for further research.

Publications:

- **MMWR/Recommendations and Reports** – Fall 2003. A summary report on findings.

The Guide to Community Preventive Services (Community Guide) provides recommendations on population-based interventions to promote health and to prevent disease, injury, disability, and premature death, appropriate for use by communities and healthcare systems. For more information about the Community Guide (including links to publications and a variety of resources) see

www.thecommunityguide.org and for more information about Task Force findings on skin cancer prevention see www.thecommunityguide.org/cancer/

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